

In the Claims

Please cancel claims 1-17 and insert the following new claims 18-53:

18. (new) A medical imaging suite comprising:

a shielded room having walls that include electromagnetic shielding;

an AC power outlet;

an MRI unit comprising a magnet that is located inside the shielded room; and

a power injector system comprising:

a power head located inside the shielded room, the power head being configured to operate a syringe to dispense contrast media from the syringe;

a power supply accessing and receiving AC power from the AC power outlet and converting the AC power to DC power;

a power connection configured to convey power from the power supply to the power head, wherein the power connection comprises a battery compartment toward which power from the power supply is conveyed and from which power is conveyed to the power head.

19. (new) The imaging suite of claim 18, wherein the power connection comprises a radio frequency filter.

20. (new) The imaging suite of claim 19, wherein the radio frequency filter grounds conductive shields of the power connection.
21. (new) The imaging suite of claim 19, wherein the radio frequency filter attenuates RF noise within a rejection frequency band selected to correspond to the RF frequencies used by the MRI unit.
22. (new) The imaging suite of claim 18, wherein the battery compartment is devoid of a battery.
23. (new) The imaging suite of claim 18, further comprising:
- a control panel located outside the shielded room for generating data signals to control the power head; and
  - a data connection configured to convey data signals from the control panel to the power head.
24. (new) The imaging suite of claim 18, wherein the AC outlet is located outside the shielded room.
25. (new) The imaging suite of claim 18, wherein the power supply is located outside the shielded room.

26. (new) The imaging suite of claim 18, wherein the power connection comprises a cable configured to convey power from the power supply toward the battery compartment of the injector system.

27. (new) The imaging suite of claim 18, wherein the power connection comprises a cable configured to convey power from the battery compartment of the injector system to the power head of the injector system.

28. (new) The imaging suite of claim 18, wherein the power head comprises an ultrasonic motor.

29. (new) The imaging suite of claim 18 further comprising a syringe mounted to the power head of the power injector system.

30. (new) The imaging suite of claim 29 further comprising contrast media disposed within the syringe.

31. (new) A method of operation for an MR injector system, the method comprising:

a power supply of the injector system receiving AC power from an AC power outlet;

the power supply converting the AC power received to DC power;

conveying power from the power supply toward a battery compartment of the injector

system; and

conveying power from the battery compartment to a power head of the injector system.

32. (new) The method of claim 31, wherein the battery compartment is devoid of a battery during the conveying of power from the power supply toward the battery compartment.

33. (new) The method of claim 31, wherein the battery compartment is devoid of a battery during the conveying of power from the battery compartment to the power head.

34. (new) The method of claim 31, further comprising a power control that comprises the battery compartment.

35. (new) The method of claim 31, wherein the conveying of power from the power supply toward the battery compartment comprises filtering emitted radio frequency energy.

36. (new) The method of claim 35, wherein the conveying of power from the power supply toward the battery compartment comprises the power being conveyed through a penetration panel of an MRI suite.

37. (new) The method of claim 36, wherein the filtering occurs prior to the power being conveyed through the penetration panel.

38. (new) The method of claim 35, wherein the filtering comprises attenuating RF noise within a rejection frequency band selected to correspond to RF frequencies used by an MRI unit.

39. (new) The method of claim 31, further comprising:

transmitting data signals from a control panel of the injector system to a power head of the injector system.

40. (new) The method of claim 31, further comprising:

installing a syringe containing contrast media on the power head of the injector system,  
and  
energizing said power head with power from the battery compartment to expel contrast media from said syringe.

41. (new) An MR injector system, the method comprising:

a power head configured to operate a syringe to dispense medical fluid from a syringe mounted thereto;

a power supply configured to receive AC power from an AC power outlet and to convert the received AC power to DC power;

a power connection configured to convey power from the power supply to the power head, wherein the power connection comprises a battery compartment toward which power from the power supply is conveyed and from which power is conveyed to the power head.

42. (new) The injector system of claim 41, wherein the power connection comprises a radio frequency filter.

43. (new) The injector system of claim 42, wherein the radio frequency filter grounds conductive shields of the power connection.

44. (new) The injector system of claim 42, wherein the radio frequency filter attenuates RF noise within a rejection frequency band selected to correspond to the RF frequencies used by the MRI unit.

45. (new) The injector system of claim 41, wherein the battery compartment is devoid of a battery.

46. (new) The injector system of claim 41, further comprising:

a control panel configured to generate data signals to control the power head; and

a data connection configured to convey data signals from the control panel to the power head.

47. (new) The injector system of claim 41, wherein the power connection comprises a cable configured to convey power from the power supply toward the battery compartment.

48. (new) The injector system of claim 47, wherein the cable comprises conductive shields.

49. (new) The injector system of claim 41, wherein the power connection comprises a cable configured to convey power from the battery compartment to the power head.

50. (new) The injector system of claim 41, wherein the power head comprises an ultrasonic motor.

51. (new) The injector system of claim 41, further comprising a power control that comprises the battery compartment.

52. (new) The injector system of claim 41 further comprising a syringe mounted to the power head.

53. (new) The injector of claim 52 further comprising contrast media disposed within the syringe.